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EXAMINER

ROBERTSON, JEFFREY

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1712

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/019,962

Applicant(s)

PERALA ET AL.

Examiner

Jeffrey B. Robertson

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8, 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 10, 12 and 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9, 10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Gasmena (U.S. Patent No. 5,703,178).

For claim 1, in column 2, lines 43-50, Gasmena teaches coatings that contain an epoxy resin, an epoxy silane, a siloxane, and optionally a pigment. In column 6, lines 22-26, Gasmena teaches that the epoxy resin may be an aliphatic epoxy resin. In column 6, lines 34-36, Gasmena teaches that the epoxy resin makes up 1-20% by weight of the composition. For claims 1, 9, and 10, in column 3, lines 38-65, Gasmena teaches the addition of an epoxy functional silane and specifically mentions glycidyoxypropyltrimethoxysilane as preferred example. In column 4, lines 1-5, Gasmena teaches that the epoxy silane is present in an amount of 0.5 to 5 % of the composition. In column 4, lines 16-40, Gasmena teaches the addition of a polysiloxane that has a molecular weight of 500 to 3500, which significantly overlaps with applicant's molecular weight. Applicant's R<sub>1</sub> and R<sub>2</sub> significantly overlap with Gasmena's R<sub>3</sub> and R<sub>4</sub>. In column 4, lines 50-52, Gasmena teaches that the amount of polysiloxane in the coating is from 0.5 to 5 %.

For claim 12, in column 9, lines 50-62, Gasmena teaches a two-part kit where the composition is placed in a first container, and an amine hardener is placed along with other additives in a second container.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gasmena (U.S. Patent No. 5,703,178).

For claim 15, in column 2, lines 43-50, Gasmena teaches coatings that contain an epoxy resin, an epoxy silane, a siloxane, and optionally a pigment. In column 6, lines 22-26, Gasmena teaches that the epoxy resin may be an aliphatic epoxy resin. In column 6, lines 34-36, Gasmena teaches that the epoxy resin makes up 1-20% by weight of the composition. For claim 15, in column 3, lines 38-65, Gasmena teaches the addition of an epoxy functional silane and specifically mentions glycidyoxypropyltrimethoxysilane as preferred example. In column 4, lines 1-5, Gasmena teaches that the epoxy silane is present in an amount of 0.5 to 5 % of the composition. In column 4, lines 16-40, Gasmena teaches the addition of a polysiloxane that has a molecular weight of 500 to 3500, which significantly overlaps with applicant's molecular weight. Applicant's R<sub>1</sub> and R<sub>2</sub> significantly overlap with Gasmena's R<sub>3</sub> and

R<sub>4</sub>. In column 4, lines 50-52, Gasmena teaches that the amount of polysiloxane in the coating is from 0.5 to 5 %.

For claims 2 and 15, the amounts of the components set forth by Gasmena include ratios that fall within applicant's claimed range. It is noted that Gasmena teaches that the epoxy-functional silane is added to enhance intercoat and substrate adhesion of the coating as well as to improve the flexibility of the cured coating. Col. 3, line 66 through col. 4, line 1. The siloxane is added to impart heat and flame resistance. Col. 4, lines 55-59. The epoxy resin is added to impart film elongation, flexibility, and for cure time. Col. 6, lines 34-45. Preferred amounts of Gasmena include 1% epoxy silane, 2% siloxane, and 8% epoxy resin. Col. 4, lines 13-15, 60-62, and col. 6, lines 43-45. Thus, the amount of epoxy silane and siloxane are within applicant's ratio. The amount of epoxy resin is a result effective variable depending on the amount of film elongation, flexibility, and cure time required for each particular application. Therefore it would have been obvious to one of ordinary skill in the art to vary the amount of epoxy resin to within applicant's claimed ratio.

5. Claims 3-5 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gasmena (U.S. Patent No. 5,703,178) as applied to claims 1 and 15 above, and further in view of Eklund et al. (U.S. Patent no. 6,180,726).

For claims 3-5 and 16-18, Gasmena teaches the limitations of claims 1 and 15 as detailed above. Although Gasmena teaches aliphatic glycidal epoxy resins, Gasmena does not teach the polyglycidyl ether of pentaerythritol as set forth in claims 5 and 18, which would also satisfy the limitations of claims 3, 4, 16, and 17.

In column 2, lines 45-64, Eklund teaches coatings containing epoxy resins. In column 8, lines 55-63, Eklund teaches that pigments may be added to the coating compositions thus forming a paint. In column 6, lines 44-46, Eklund teaches the use of aliphatic epoxy resins such as pentaerythritol polyglycidyl ether.

Eklund and Gasmena are analogous art in that they both teach the use of epoxy resins in paint compositions that also contain silicone components. It would have been obvious to one of ordinary skill in the art at the time of the invention to use pentaerythritol polyglycidyl ether as the aliphatic glycidal epoxy resin. The motivation would have been that Gasmena provides the express suggestion to use this type of an epoxy resin. One of ordinary skill in the art would have looked to Eklund to provide specific examples of such resins.

6. Claims 3, 4, 6, 7, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gasmena (U.S. Patent No. 5,703,178) as applied to claims 1 and 15 above, and further in view of Iwamura et al. (U.S. Patent no. 5,705,567).

For claims 4, 6, and 17, Gasmena teaches the limitations of claims 1, 3, and 15 as detailed above. Although Gasmena teaches aliphatic glycidal epoxy resins, Gasmena does not teach the triglycidyl ether of glycerine or neopentyl glycol diglycidyl ether as set forth in claims 6 and 7, which would also satisfy the limitations of claims 3, 4, 16, and 17.

In column 1, lines 10-31, Iwamura teaches paints containing epoxy resins. In column 10, lines 26-38, Iwamura teaches the use of aliphatic epoxy resins such as triglycidyl ether of glycerine or neopentyl glycol diglycidyl ether.

Iwamura and Gasmena are analogous art in that they both teach the use of epoxy resins in paint compositions that also contain silicone components. It would have been obvious to one of ordinary skill in the art at the time of the invention to use triglycidyl ether of glycerine or neopentyl glycol diglycidyl ether as the aliphatic glycidal epoxy resins. The motivation would have been that Gasmena provides the express suggestion to use these types of epoxy resins. One of ordinary skill in the art would have looked to Iwamura to provide specific examples of such resins.

***Allowable Subject Matter***

7. Claim 8, 13, and 14 are allowed.

***Response to Arguments***

8. Applicant's arguments filed 12/23/05 have been fully considered but they are not persuasive.

Applicant argues that the Patent Office has provided no evidence to support the position that the declaration does not distinguish the full scope of the claims. Applicant also argues that the Patent Office disregards the showing in the declaration that the color difference with Gasmena is different for compositions with and without the silicon containing polyether. In response, the examiner's position is that the comparison example of Gasmena without Kaneka provides evidence that applicant's have not distinguished the full scope of the claims. Specifically, this example has the same components set forth by applicant, but has significantly less gloss retention and a greater color difference than the compositions set forth by applicant.

Regarding applicant's arguments pertaining to the use of the phrase "consisting essentially of", the examiner has not ignored the color difference shown by applicant as evidenced by the comments made by the examiner in the last office action that acknowledged differences shown by applicant, but questioned this difference as a result of the weight percentages selected by applicant, particularly between the amounts of the Siloxane added in Gasmena and the "Present invention."

Although applicant argues that the amounts in the declaration coincide with the amounts found in Table 1, the examiner's position is that these amounts are still outside the ratios set forth in claims 2 and 15. With respect to the ratios set forth in these claims, applicant argues that the amounts set forth are not result effective variables and do not anticipate or render obvious the ratios of claims 2 and 15. The examiner disagrees. As pointed out above, Gasmena specifically sets forth the reasons why each component is added to the composition. Thus, the results obtained from varying the amounts of each variable have been recognized and would have been obvious to one of ordinary skill in the art. It is noted that this rejection has been made non-final due to the new rejection of claim 2 under 35 U.S.C. §103(a).

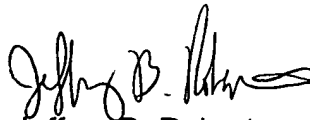
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jeffrey B. Robertson  
Primary Examiner  
Art Unit 1712

JBR